

REMARKS

The Office Action dated September 13, 2005 has been received and carefully noted. The above amendments to the claims and the following remarks are submitted as a full and complete response to the Office Action.

Claims 14, 21, 31, 33, and 34 are amended to particularly point out and distinctly claim the subject matter of the invention. The subject matter of cancelled claim 15 is incorporated into claims 14, 21, 31, 33 and 34. Thus, Applicants request entry of the amendments because the amendments place the application in condition for allowance, do not contain new matter, and do not present issues requiring further consideration and/or search. Claims 2-14, 16, 17, 19-29 and 31-35 are respectfully submitted for consideration.

The Office Action rejected claims 2, 3, 7-19, 21-28 and 32-33 under 35 U.S.C. 103(a) as being obvious over US Patent No 6,577,865 to Dikmen (Dikmen) in view of US Patent No. 4,797,880 to Bussey Jr. (Bussey). The Office Action took the position that Dikmen disclosed all of the features recited in the above claims except for the feature of a first network element that generates fake packets to be transmitted with said intercepted data packets and the fake packets are transmitted from said first network element to the interception gateway element. The Office Action asserted that Bussey disclosed this feature. Applicants respectfully submit that the cited references taken individually or in combination fail to disclose or suggest all of the features recited in any of the pending claims. The rejection of claim 15 is moot in light of the cancellation of this claim.

Specifically, Applicants submit that Bussey fails to make up for the admitted deficiencies of Dikmen.

Claim 14, upon which claims 2-13 and 16-17 depend, recites an interception method for performing a lawful interception in a packet network. The method includes a) providing a first network element having an interception function for intercepting data packets, b) controlling the interception function by an interception control means implemented in a second network element, and c) transmitting an intercepted data packet from the first network element via the packet network to an interception gateway element providing an interface to at least one intercepting authority, wherein the first network element generates fake packets to be transmitted with said intercepted data packets and the fake packets are transmitted from the first network element to the interception gateway element. Further, in the method the transmitting means transmits the fake packets at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to the interception gateway element is constant.

Claim 21, from which claims 19-20, 22-29 and 32 depend, recites an interception system for performing a lawful interception in a packet network. The interception system includes: a) a first network element having an interception function for intercepting data packets and comprising a transmitting means for transmitting an intercepted data packet to the packet network, b) an interception control means implemented in a second network element and controlling the interception function, and c) an interception gateway element having a receiving means for receiving said intercepted data packet and an

interface means for providing an interface to at least one intercepting authority. In the system, the first network element further includes a means for generating fake packets to be transmitted with said intercepted data packets. Further in the system the transmitting means transmits the fake packets at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to the interception gateway element is constant.

Claim 33 recites a network element for a packet network. The network element includes: a) an interception means for intercepting a data packet received from the packet network, and b) a transmitting means for transmitting the intercepted data packet via the packet network to an interception gateway element. In the network element, the interception means is controlled by an interception control means arranged in another network element, and the network element further includes a means for generating fake packets to be transmitted with the intercepted data packets and the fake packets are transmitted from the network element to the interception gateway element. In the network element the fake packets are transmitted at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to the interception gateway element is constant.

The present invention recites the features that the fake packets can be transmitted from a first network element to the interception gateway element. The fake packets can be transmitted at random or triggered at any passing packet. This can be accomplished in

such as manner that the total load of intercepted and fake packets that are transmitted to the interception gateway element is constant. Thus, any operating personnel cannot use a detection mechanism, such as a timing analysis, to detect whose packets are being intercepted. In addition, the true interception activity cannot be determined if the load of the intercepted data packet is constant. Applicants submit that the cited references fail to disclose or suggest all of the features of any of the pending claims and thereby fail to provide the advantages thereof.

Dikmen is directed to a system for the intercept of wireless communications wherein a HLR of a wireless communications system includes one or more flags associated with each subscriber, and the HLR notifies an intercept server each time a call event is detected in the HLR for a subscriber under surveillance as indicated by the flags. The intercept server includes a Gateway Delivery Function module and one or more Delivery Function modules, wherein the Gateway Delivery Function module provisions the Delivery Function modules depending on the location of the subscriber, to deliver call content or data from an MSC to a collection function operated by a law enforcement agency. Non-call associated data is also provided to a Delivery Function module for delivery to a Collection Function.

Further, the Office Action admits that Dikmen fails to disclose or suggest the feature of a first network element that generates fake packets to be transmitted with said intercepted data packets and the fake packets are transmitted from said first network

element to the interception gateway element, as recited in claim 14 and similarly recited in claims 21 and 33. The Office Action asserts that Bussey makes up for this deficiency.

Bussey is directed to a non-blocking, self routing packet switch. As described in Bussey, fake place holding packets are used to insure that during each packet switch cycle a packet is routed from each input port to each output port.

Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in the pending claims. Specifically, Bussey fails to make up for the admitted deficiencies of Dikmen.

In order to establish a prima facie case of obviousness the cited references when combined must teach or suggest all of the claim limitations. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As discussed above, the cited references fail to disclose or suggest the recited feature of transmitting fake packets with the intercepted packets. Bussey, at column 5 lines 57- 59 clearly discloses that the “fake packets are transmitted no further than the corresponding output ports. The Office Action took the position that Bussey suggests that “the fake packet traffic can indeed be transmitted to other network elements,” and cites col. 6 lines 60-65. The portion of Bussey cited in the Office Action states that “dummy” packets (as opposed to “fake” packets recited in column 5 lines 57-59), which contain no data are routed through the sorting network. The Office Action appears to suggest that “dummy” packets are analogous to the recited fake packets, as opposed to the fake packets that are actually described in Bussey. “Dummy” packet transmission is

dependent on an input port and dependent on a processing phase during which a respective input port reserved an output port (see column 6 lines 56 – 65).

Further if, for the sake of argument only, the dummy packets are analogous to the recited fake packets, Bussey still fails to mention, disclose or suggest the feature of transmitting the dummy packets with any intercepted data packets and therefore, fails to make up for the admitted deficiencies of Dikmen.

Thus, because Bussey fails to make up for the admitted deficiencies of Dikmen, the cited references taken individually or in combination fail to disclose or suggest all of the features recited in any of the pending claims.

Further, Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest at least the feature of fake packets are transmitted at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to said interception gateway element is constant, as recited in claim 14 and similarly recited in claim 21, 31 and 33.

The Office Action alleged in the rejection of cancelled claim 15 that this feature is disclosed or suggested on column 5 lines 60-65 of Bussey. However, neither of the cited references mention, discloses or suggests that the total load of intercepted and fake packets are transmitted to the interception gateway element is constant, as recited in claim 14 and similarly recited in claim 21.

Thus, the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the above claims.

Further, Applicants respectfully submit that there is no motivation to combine the cited references to disclose all of the features recited in the pending claims, because there is no motivation to combine the references other than that provided in the Applicants' disclosure, and the cited references fail to suggest the desirability of the cited combination.

In order to establish a prima facie case of obviousness, there must be some motivation to combine the references other than that provided in Applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Further, the mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness, unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

As discussed above, Dikmen is directed to a system for the interception of wireless communications and Bussey is directed to a packet switch. The Office Action appears to assert that the references can be properly combined because Dikmen references a switching device. However, the referenced portion of Dikmen describes platform specifications and merely states "It is also desirable if the platform provides for up to 4 Access Functions, up to 4000 port time slot interchange switch, configurable for up to 4 access functions . . ." Thus this section describes a platform in which the intercept server described in Dikmen can be utilized. Applicants submit that the mere mention of the word "switch" does not indicate any desirability to combine the teaching of Dikmen and Bussey.

Applicants further submit that because claims 2-3, 7-13, 15-19, 22-28, 22-29, and 32 depend from claims 14 and 21 these claims are allowable at least for the same reasons as claims 14 and 21. Further, the cited references fail to disclose or suggest the features of these dependent claims.

Based at least on the above, Applicants submit that the cited references, taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims. Accordingly, withdrawal of the rejection of claims 2-3, 7-14, 16-19, 21-28 and 32-33 under 35 U.S.C. 103(a) is respectfully requested.

The Office Action rejected claims 4-6, 20, 29, 31, 34 and 35 as being obvious over Dikmen and Bussey, in view of US Publication No. 2003/0037235 to Aziz et al (Aziz). The Office Action took the position that Dikmen disclosed all of the features recited in the above claims except for the feature of the use of fake packets, and asserted that Bussey disclosed this feature. The Office Action also took the position that Dikmen and Bussey disclosed all of the features of these claims except for the feature of a decryption means for removing an encryption of the received intercepted packets. The Office Action asserted that Aziz disclosed this feature. Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the above claims. Applicants further submit that Dikmen and Bussey are deficient at least for the same reasons discussed above and Aziz fails to make up for these deficiencies.

Claim 31 recites an interception system for performing a lawful interception in a packet network. The system includes a) a first network element having an interception function for intercepting data packets and including a transmitting means for transmitting an intercepted data packet to the packet network, b) an interception control means implemented in a second network element and controlling the interception function, and c) an interception gateway element having a receiving means for receiving the intercepted data packet and an interface means for providing an interface to at least one intercepting authority. In the system, the interception gateway element includes a memory means for storing received intercepted data packets before supplying them to the interface means and the interception gateway element comprises a decryption means for removing an encryption of the received intercepted data packets, an extraction means for extracting intercepted data packets from fake data packets, and a means for adding a time information to the received intercepted data packets before storing them in the memory means. Further, in the interception system, the transmitting means transmits said fake packets at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to said interception gateway element is constant.

Claim 34 recites an interception gateway element for an interception system of a packet network. The element includes a receiving means for receiving an intercepted data packet via said packet network from a network element having an interception function, and an interface means for providing an interface to an intercepting authority. The element further includes a memory means for storing received intercepted data

packets before supplying them to said interface means wherein said interception gateway element comprises a decryption means for removing an encryption of the received intercepted data packets, an extraction means for extracting intercepted data packets from fake data packets and a means for adding a time information to said received intercepted data packets before storing them in said memory. In the gateway element, the receiving means receives said fake packets transmitted at random or triggered at any passing packet, such that the total load of intercepted and fake packets received by said interception gateway element is constant.

Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in the above claims. Specifically, Bussey fails to make up for the admitted deficiencies of Dikmen.

As discussed above, the cited references fail to disclose or suggest the recited feature of transmitting fake packets with the intercepted packets. Bussey, at column 5 lines 57- 59 clearly discloses that the “fake packets are transmitted no further than the corresponding output ports.” The Office Action took the position that Bussey suggests that “the fake packet traffic can indeed be transmitted to other network elements,” and cited col. 6 lines 60-65 of Bussey. The portion of Bussey cited in the Office Action states that “dummy” packets (as opposed to “fake” packets recited in column 5 lines 57-59), which contain no data, are routed through the sorting network. The Office Action appears to suggest that “dummy” packets are analogous to the recited fake packets, as opposed to the fake packets that are actually described in Bussey. In Bussey, “dummy”

packet transmission is dependent on an input port and dependent on a processing phase during which a respective input port, reserved an output port (see column 6 lines 56 – 65).

Further if, for the sake of argument only, the dummy packets are analogous to the recited fake packets, Bussey still fails to mention, disclose or suggest the feature of transmitting the dummy packets with any intercepted data packets, as recited in claim 31 and similarly recited in claim 34. Therefore, Bussey fails to make up for the deficiencies of Dikmen.

Thus, the cited references taken individually or in combination fail to disclose or suggest all of the features recited in any of the pending claims at least for the above mentioned reasons.

Applicants further submit that Aziz fails to make up for the deficiencies of Dikmen and Bussey.

Aziz is directed to a system for encrypting and decrypting data packets that are sent from a source host to a destination host across a public network. Aziz describes a tunneling bridge that is positioned at the interface between a private network and a public network for each of a number of such private networks. The tunneling bridge for a given private network intercepts all packets sent outside of the network, and automatically determines from the tables whether each such packet should be encrypted. If so, the tunneling bridge encrypts the packet using an encryption method and key appropriate for

the destination host, and adds an encapsulation header with source and destination address information and sends the packet onto the network.

Applicants respectfully submit that Aziz does not mention, disclose or suggest at least the feature of transmitting fake packets with intercepted packets and the feature of the fake packets being transmitted at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to the interception gateway element is constant, as recited in claim 31 and similarly recited in claim 34. Thus, Aziz fails to make up for the deficiencies of Dikmen and Bussey.

Applicants further submit that because claims 4-6, 20, 29 and 35 depend from claims 14, 21 and 34 these claims are allowable at least for the same reasons as claims 14, 21 and 34. Specifically, regarding claims 4-6, 20 and 29 Aziz fails to make up for the deficiencies of Dikmen and Bussey as discussed above regarding claims 14 and 21. Further, the cited references taken individually or in combination fail to disclose or suggest all of the features of these dependent claims.

Based at least on the above, Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in claims 4-6, 20, 29, 31, 34 and 35. Accordingly, withdrawal of the rejection of these claims under 35 U.S.C. 103(a) is respectfully requested.

Applicants respectfully submit that each of claims 2-14, 16, 17, 19-29 and 31-35 recite features that are neither disclosed nor suggested in any of the cited references.

Accordingly, Applicants respectfully request that each of claims 2-14, 16, 17, 19-29 and 31-35 be allowed and this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


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